

75 VSAT



sinuta 

Satellite Antenna
for KA & KU Band
Technical Brochure

Confidential Document

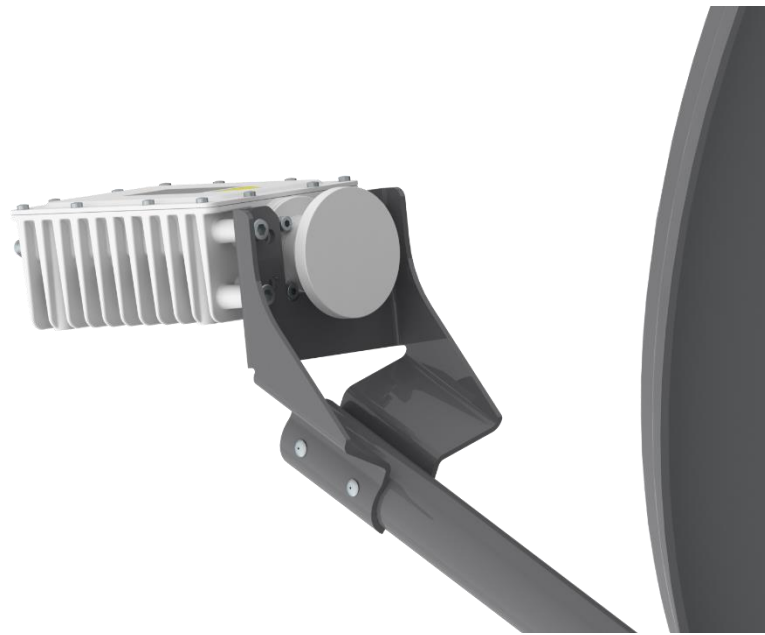
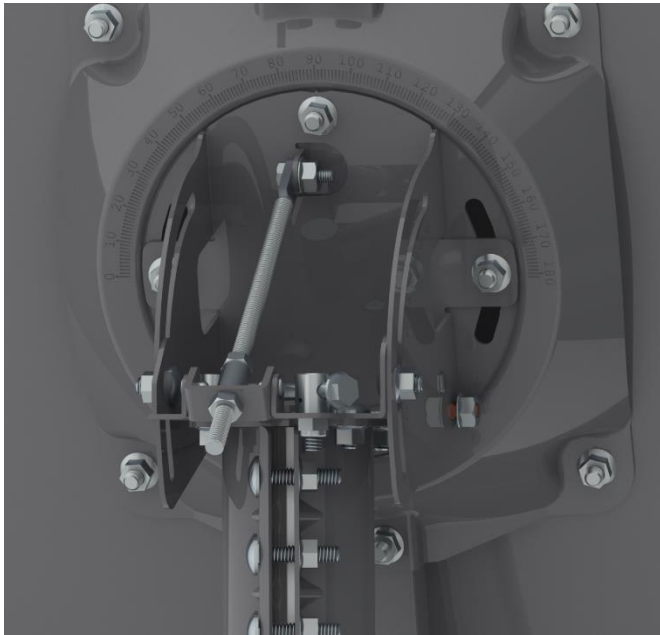


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Photo Documentation II



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Technical Specifications

RF

Optics Type
Offset (°)
Effective Aperture (cm)
Polarization
F/D Ratio
Frequency Range (GHz)

Offset
20.8
75 (75x80 Physical Axis)
Circular (R/L) / Linear
0.78

Ka-Band

TX 27.5 – 30.0
RX 17.3 – 20.2

Ku-Band

TX 13.75 – 14.50
RX 10.70 – 12.75

Gain (dBi)

Ka-Band

TX 45.5 +/- 0.4 @ 30.0GHz
RX 42.1 +/- 0.4 @ 20.2GHz

Ku-Band

TX 39.2 +/- 0.2 @ 14.5GHz
RX 38.1 +/- 0.2 @ 12.75GHz

-3 dB Beamwidth AZ/EL

Ka-Band

TX 0.95° @ 30.0GHz
RX 1.39° @ 20.2.0GHz

Ku-Band

TX 1.9° @ 14.5GHz
RX 2.1° @ 12.75GHz

Sidelobe Pattern (TX-Co Polar Plane)
In accordance with Eutelsat EESS 502

29-25 log θ dBi for 100 λ /D < θ ≤ 20°
-3.5 dBi for 20° < θ ≤ 26.3°
32-25 log θ dBi for 26.3° < θ ≤ 48°
-10 dBi for 48° < θ

Cross Polarization (within -1dB contour)

>23dB on RX Ka-band
>25dB on TX Ka-band

30dB on RX Ku-Band
30dB on TX Ku-Band

MECHANICAL

Reflector Material
Reflector RMS Surface Accuracy (mm)
Adjustment Range

One Piece Powder Painted Galvanized Steel

< 0.3

Azimuth 360° Continuous, with ±5° Fine Adjustment system

Elevation 5° ~ 90° with continuous Fine Adjustment system

Polarization (Skew) ±23° continuous

Mast Pipe Interface
FEED ARM Interface

Ø 60mm (Top Pole)

Ø32mm (outer diameter) / Ø29mm (inner diameter) / **Customizable to any Customer**

Feed/Transceiver Interface

ENVIRONMENTAL

Windload Tests
Salt Spray
Operational Temperature

In accordance with ESOG120 – Type Approval and characterization Procedures from Eutelsat







750h ASTM B-117

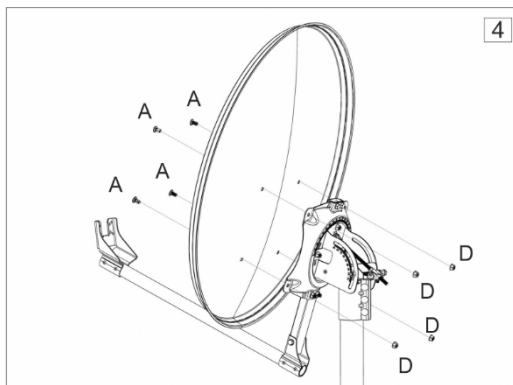
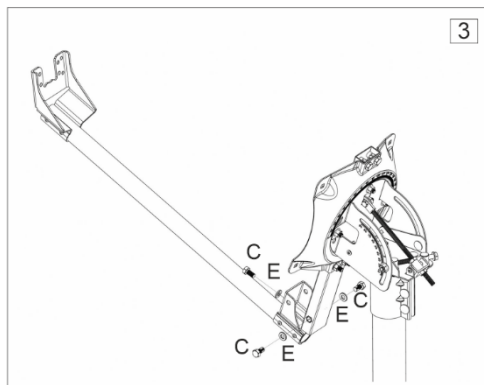
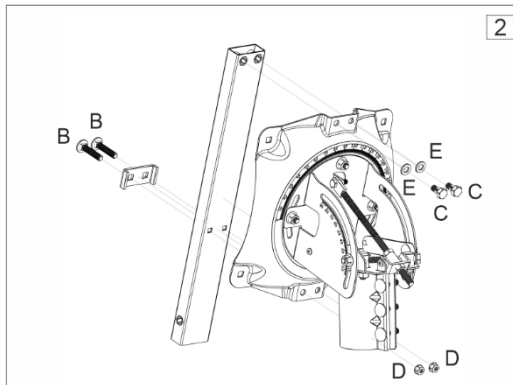
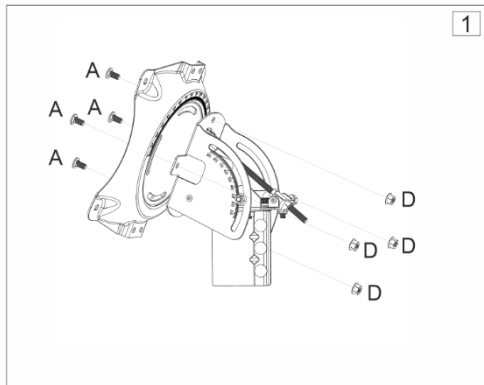
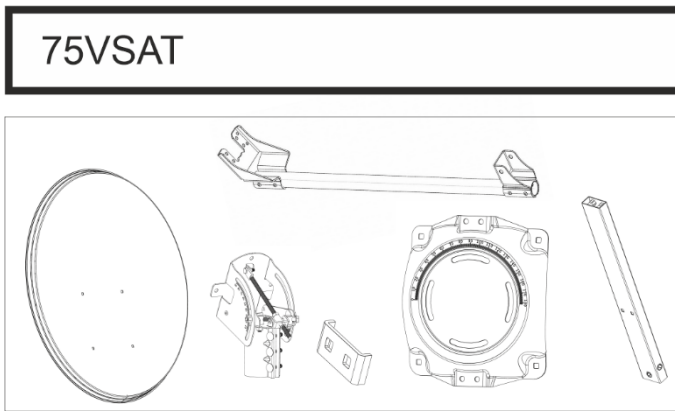
-40°C to 60°C

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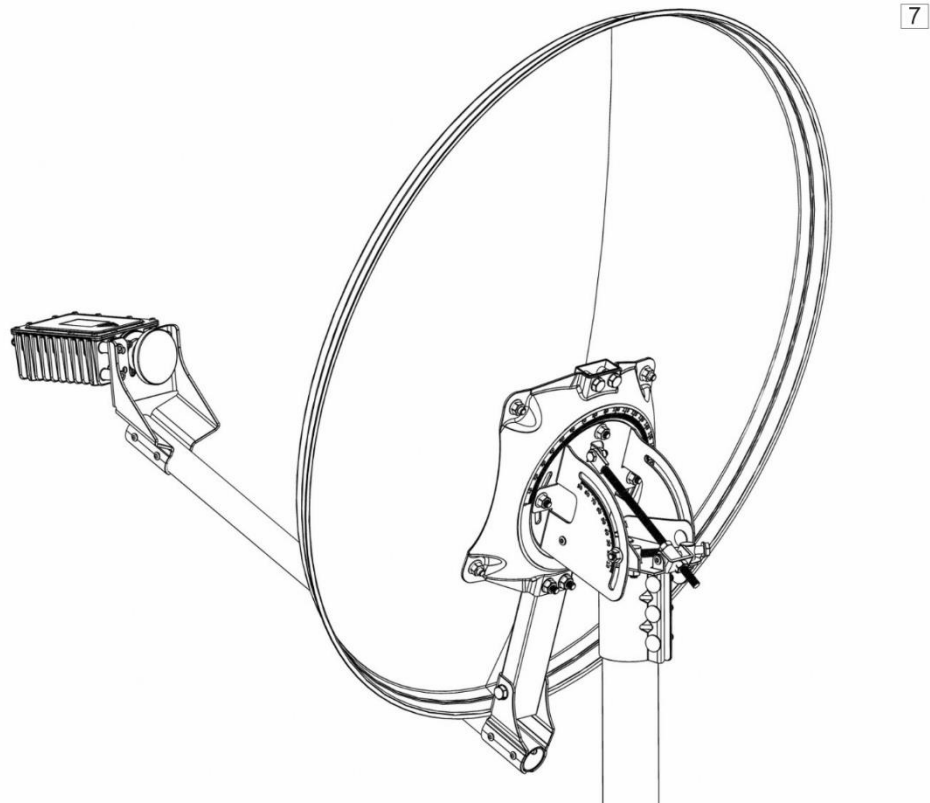
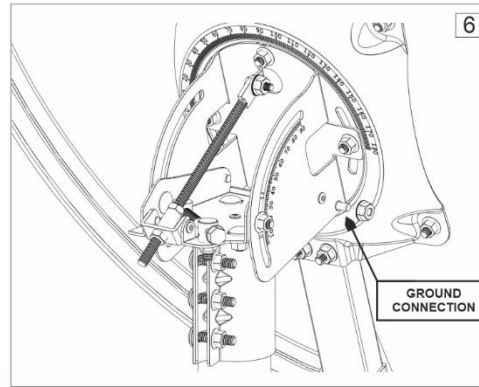
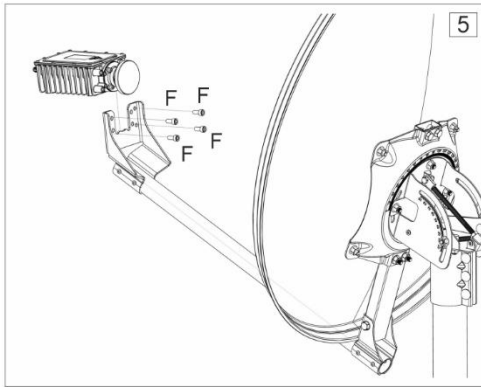
A		M8 x 16 Oval head, short neck	8
B		M8 x 45 Oval head, long neck	2
C		M8x16 Hex bolt	5
D		M8 sext nut	10
E		M8 washer	5
F		M6x15 Socket head cap screw	4



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